

IN THE CLAIMS

CANCEL claim 1.

AMEND claims 2 - 4, 7, 10, 12, 14 and 15 to read as follows:

2. (Amended) A high-frequency semiconductor device as set forth in claim ~~1~~, wherein said antenna connection is an antenna line of a patterned conductor.

a' 3. (Amended) A high-frequency semiconductor device as set forth in claim ~~1~~, wherein said antenna connection is an active region formed in said semiconductor substrate.

b 4. (Amended) A high-frequency semiconductor device comprising:
an antenna-ground plane provided above a semiconductor substrate, to be connected to the ground potential;

a patch electrode⁶ provided on said antenna-ground plane with an interlayer insulation film therebetween;

an antenna connection^{6a} provided under said antenna-ground plane and connected to said patch electrode via a through-hole⁷ formed passing through said antenna-ground plane; and

a line conductor provided above said semiconductor substrate, said line conductor forming a high-frequency transmission line together with the ground potential.

11. (Amended) A high-frequency semiconductor device comprising:

B an antenna-ground plane provided above a semiconductor substrate, to be connected to the^a ground potential;

a patch electrode provided on said antenna-ground plane with an interlayer insulation film therebetween;

G2 an antenna connection provided under said antenna-ground plane and connected to said patch electrode via a through-hole formed passing through said antenna-ground plane; and

a line conductor provided on said antenna-ground plane with an interlayer insulation film therebetween, said line conductor forming a high-frequency transmission line together with said antenna-ground plane.

14. (Amended) A high-frequency semiconductor device comprising:

B an antenna-ground plane provided above a semiconductor substrate, to be connected to the^a ground potential;

G3 a patch electrode provided on said antenna-ground plane with an interlayer insulation film therebetween and;

an antenna connection provided under said antenna-ground plane and connected to said patch electrode via a through-hole formed passing through said antenna-ground plane;

wherein a passive device is provided under said antenna-ground plane.

Q46¹². (Amended) A high-frequency semiconductor device as set forth in claim¹ A, wherein said interlayer insulation film is composed of a resin insulating material.

Q5⁸¹⁴. (Amended) A high-frequency semiconductor device as set forth in claim¹ A, wherein said patch electrode has a rectangular shape or a circular shape.

9¹⁵. (Amended) A high-frequency semiconductor device as set forth in claim¹ A, wherein each of said patch electrode and antenna-ground plane is formed of a high conductive material.